2018 was a difficult year for investors as a number of risk factors overwhelmed the investment environment, which included a tightening in financial conditions triggered by the continued interest rate normalisation in the US, intensified trade tensions between the major economies, as well as rising populism and geopolitical risks in many parts of the world. Global equity markets declined across the board while US Treasury yields rose following four rate hikes engineered by the US Federal Reserve. The US dollar strengthened along with the rising US interest rates. Some emerging market currencies depreciated significantly as a result of severe domestic political and economic pressures. Despite the challenging environment, the Exchange Fund recorded an investment income of HK\$10.9 billion in 2018.



THE EXCHANGE FUND

The Exchange Fund's primary objective, as laid down in the Exchange Fund Ordinance, is to affect, either directly or indirectly, the exchange value of the currency of Hong Kong. The Fund may also be used to maintain the stability and integrity of Hong Kong's monetary and financial systems to help maintain Hong Kong as an international financial centre. The HKMA, under the delegated authority of the Financial Secretary (FS) and within the terms of the delegation, is responsible to the FS for the use and investment management of the Exchange Fund.

MANAGEMENT OF THE EXCHANGE FUND

Investment objectives and portfolio structure

The Exchange Fund Advisory Committee (EFAC) has set the following investment objectives for the Exchange Fund:

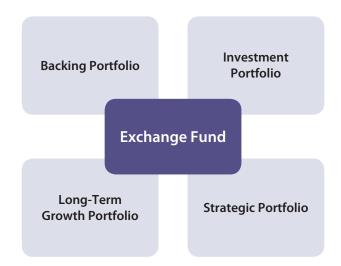
- (a) to preserve capital;
- to ensure that the entire Monetary Base, at all times, is fully backed by highly liquid US dollar-denominated assets;
- (c) to ensure that sufficient liquidity is available for the purposes of maintaining monetary and financial stability; and
- (d) subject to (a)–(c), to achieve an investment return that will help preserve the long-term purchasing power of the Fund.

These objectives take full account of the statutory purposes of the Exchange Fund, and are incorporated into the portfolio structure and the target asset mix of the Fund.

Broadly speaking, the Exchange Fund has two major portfolios: the Backing Portfolio (BP) and the Investment Portfolio (IP). The BP holds highly liquid US dollar-denominated assets to provide full backing to the Monetary Base as required under the Currency Board arrangements. The IP invests primarily in the bond and equity markets of the member countries of the Organisation for Economic Co-operation and Development to preserve the value and long-term purchasing power of its assets.

To better manage risks and enhance returns in the medium and long term, the HKMA has been diversifying part of the Exchange Fund's investments, in a prudent and incremental manner, into a wider variety of asset classes. This includes emerging market and Mainland bonds and equities, private equity (including infrastructure), and real estate. Emerging market and Mainland bonds and equities are held under the IP, while private equity and real estate investments are held under the Long-Term Growth Portfolio (LTGP). The cap for the market value of investments under the LTGP is set at the aggregate of one-third of the accumulated surplus of the Exchange Fund and the portion of the Future Fund and placements by subsidiaries of the Exchange Fund linked to the LTGP.

The Strategic Portfolio, established in 2007 to hold shares in Hong Kong Exchanges and Clearing Limited that were acquired by the Government for the account of the Exchange Fund for strategic purposes, is not included in the assessment of the Fund's investment performance because of the unique nature of this Portfolio.

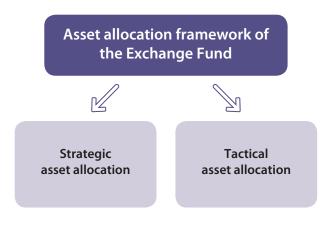


Placements with the Exchange Fund

The Exchange Fund, from time to time, accepts placements by fiscal reserves, Government funds and statutory bodies. The interest rate is generally linked to the performance of the IP¹, with the major exception of the Future Fund, which links its interest rate to both the IP and the LTGP with reference to the portfolio mix. As at the end of 2018, the portfolio mix of the Future Fund between the IP and the LTGP was about 50:50.

The investment process

The investment process of the Exchange Fund is underpinned by decisions on two types of asset allocation: the strategic asset allocation and the tactical asset allocation. The strategic asset allocation, reflected in the investment benchmark, represents long-term asset allocation given the investment objectives of the Exchange Fund. Guided by the strategic allocation, assets are tactically allocated in an attempt to achieve an excess return over the benchmark. This means the actual allocation is often different from the benchmark, or strategic, allocation. The differences between the actual and benchmark allocations are known as "tactical deviations". While the benchmark and tracking error² limit are determined by the FS in consultation with the EFAC, tactical decisions and allowable ranges for tactical deviations are made and set by the HKMA under delegated authority. Within the ranges allowed for tactical deviations, portfolio managers may assume positions to take advantage of shortterm market movements.



The rate is the average annual investment return of the IP for the past six years, or the average annual yield of three-year Government Bond for the previous year subject to a minimum of 0%, whichever is higher.

Investment management

Direct investment

The HKMA set up the Exchange Fund Investment Office (EFIO) in August to house its investment and related risk management functions. Staff members in the EFIO directly manage about 72% of the investments of the Exchange Fund, comprising the entire BP and part of the IP. This part of the IP includes a set of portfolios invested in global fixed-income markets and various derivative overlay portfolios implementing macro risk management strategies for the Fund.

Use of external managers

In addition to managing assets internally, the HKMA employs external fund managers to manage about 28% of the Exchange Fund's assets, including all of its listed equity portfolios and other specialised asset classes. The purpose of engaging external managers is to tap the best investment expertise available in the market to realise sustainable returns, draw on diverse and complementary investment styles, and gain their market insights and technical expertise in investment.

Expenditure relating to the use of external managers includes fund management and custodian fees, transaction costs, and withholding and other taxes. The expenditure is determined primarily by market factors and may fluctuate from year to year.

Risk management and compliance

The growing complexity of the investment environment has underlined the importance of risk management. Stringent controls and investment guidelines have been established for both internally and externally managed portfolios, and compliance with guidelines and regulations is closely monitored. Risk assessment has been strengthened to support the Exchange Fund's increased level of investment diversification. Risk-control tools are deployed to assess market risks under both normal and adverse market conditions. Detailed performance attribution analyses are also conducted to identify sources of performance, enabling the HKMA to assess how to make the best use of the investment skills of both internal and external managers.

² "Tracking error" measures how closely a portfolio follows its benchmark.

Responsible investment

The HKMA is supportive of responsible investment. For instance, the HKMA has adopted the Principles of Responsible Ownership (PRO) issued by the Securities and Futures Commission, which help investors to determine how best to meet their ownership responsibilities in relation to their investments in Hong Kong-listed companies. For the management of the Exchange Fund, the HKMA has developed internal guidelines on environmental, social and governance (ESG) factors covering the process of selection, appointment and monitoring of external fund managers. The appointed external fund managers for the HKMA's Hong Kong equity active portfolio are required to adhere to the PRO in managing the investments. More generally, the HKMA has incorporated ESG factors into various internal procedures for conducting and monitoring investment activities. The HKMA will monitor the development of ESG standards closely and assess how these standards can be further integrated into its investment process. Additionally, in order to facilitate international collaboration on responsible investment, the HKMA has become a member of FCLTGlobal, which is a not-for-profit organisation that works to encourage a longer-term perspective in business and investment decision-making.

PERFORMANCE OF THE EXCHANGE FUND

The financial markets in 2018

In 2018, a number of risk factors which had been underpriced by the markets materialised one after another. These included the pace of interest rate normalisation in the US, the negative impact of the US government's foreign trade policy and protectionism on global trade, and geopolitical risks. They triggered adjustments and led to heightened volatilities in global financial markets.

Amid investor jitters about the escalating US-China trade disputes, equity markets in emerging market economies and Hong Kong had been on a downward trend since the end of January, with the Hang Seng Index losing as much as 27% from its January peak. Major stock markets in Europe and the US had also declined sharply since the fourth quarter, posting double-digit falls. For 2018 as a whole, global equities declined across the board in general, with the MSCI World Index (covering equity markets in developed economies) falling by 10.4% and the MSCI Emerging Markets Index by 16.6%.

In the bond markets, US Treasury yields generally rose in 2018 owing to US monetary policy normalisation. That said, the bond markets also experienced volatility in the year. For example, 10-year US Treasury yields rose from around 2.5% at the beginning of the year to a seven-year high of 3.2% in November before softening to 2.7% at year-end amid investor concerns on the US-China trade dispute and demand for safe haven assets.

In the currency markets, the US dollar strengthened in tandem with US rate hikes in the year. The US dollar index rose by 4.4% in the year, while major currencies such as the euro and renminbi fell by around 5% against the US dollar. In addition, some emerging market currencies suffered a further blow amidst domestic political and economic upheavals. For example, the Argentine peso and Turkish lira depreciated by around 50% and 30% respectively against the US dollar. In contrast, the yen strengthened by 2.7% against the US dollar, buoyed by safe-haven demand.

The performance of major currency, bond and equity markets in 2018 is shown in Table 1.

ROCK I
-4.8%
+2.7%
+0.8%
-6.2%
-13.6%
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The Exchange Fund's performance

The Exchange Fund recorded an investment income of HK\$10.9 billion in 2018. This comprised gains on bonds of HK\$57.4 billion, losses on Hong Kong equities of HK\$20.7 billion, losses on other equities of HK\$38.7 billion, a negative currency translation effect of HK\$9.0 billion on non-Hong Kong dollar assets and gains of HK\$21.9 billion on other investments held by the investment holding subsidiaries of the Fund. Separately, the Strategic Portfolio recorded a valuation loss of HK\$0.5 billion.

The total assets of the Exchange Fund reached HK\$4,054.9 billion at year-end. The market value of investments under the LTGP totalled HK\$283.6 billion, with private equity amounting to HK\$191.1 billion and real estate at HK\$92.5 billion. Outstanding investment commitments amounted to HK\$202.4 billion.

The investment return of the Exchange Fund in 2018, excluding the Strategic Portfolio, was 0.3%. Specifically, the IP recorded a negative rate of return of 2.4%, while the BP gained 2.1%. The LTGP has recorded an annualised internal rate of return of 12.9% since its inception in 2009.

The annual returns of the Fund from 1994 to 2018 are set out in Chart 1. Table 2 shows the 2018 investment return and the average investment returns of the Fund over several different time horizons. The average return was 3.2% over the past three years, 2.1% over the past five years, 2.8% over the past 10 years and 4.7% since 1994³. Table 3 shows the currency mix of the Fund's assets on 31 December 2018.

Averages over different time horizons are calculated on an annually compounded basis.

Chart 1 Investment returns of the Exchange Fund (1994–2018)¹



2. Composite CPI is calculated based on the 2014/2015-based series.

Table 2 Investment return of the Exchange Fund in Hong Kong dollar terms¹

Investment return^{2 & 3}

2018	0.3%
3-year average (2016–2018)	3.2%
5-year average (2014–2018)	2.1%
10-year average (2009–2018)	2.8%
Average since 1994	4.7%

- 1. The investment returns for 2001 to 2003 are in US dollar terms.
- Investment return calculation excludes the holdings in the Strategic Portfolio.
- 3. Averages over different time horizons are calculated on an annually compounded basis.

Table 3 Currency mix of the Exchange Fund's assets on 31 December 2018 (including forward transactions)

		_
	HK\$ billion	%
US dollar	3,298.8	81.4
Hong Kong dollar	361.5	8.9
Others ¹	394.6	9.7
Total	4,054.9	100.0

1. Other currencies included mainly euro, renminbi, pound sterling and Japanese yen.